

AD 613 608

Argumentative Themes in Civil Defense:

(1) A Content Analysis of the New York Times

by

Erwin P. Bettinghaus

Communication Research Report  
June 15, 1964

Prepared for:  
Office of Civil Defense  
Department of Defense  
Contract #: OCD-PS-64-71

This report has been reviewed in the Office of Civil Defense and approved for publication. Approval does not signify that the contents necessarily reflect the policies of the Office of Civil Defense.

Best Available Copy

### Executive Summary

One of the sub-tasks given to Michigan State University under Contract OCD-PS-64-71 is to provide a continuing test of civil defense materials in terms of their acceptability to the public and their relative occurrence in the nation's media. This first report lays the groundwork for efforts during 1965 at accomplishing the major portion of the task. The report seeks to identify the major arguments in the civil defense area, and to provide a limited description of the frequency of occurrence of the various arguments in a major newspaper.

This report should be read in the light of proposed studies to be made during 1965. It does not reflect the general acceptability of materials now being produced by the Public Affairs section within the Office of Civil Defense. It does, however, provide a category scheme for the testing of current materials.

The report should not be taken as evidence of the relative frequency of certain arguments occurring within the mass media of the nation, since the analysis in this first phase was limited to the New York Times alone. The Times is an important news source and an influential paper, but if our analysis had been extended to other papers or to news magazines and electronic media, the number of possible categories might have been increased. Certainly the percentage reported in this study would have changed.

The real value of this report is that (1) it provides the communication researcher or the public affairs specialist with a category scheme for describing the materials to be found in the civil defense field, and (2) it provides in Appendix A an attempt to reconcile two divergent reports on civil defense materials. One report, the basic one in the present study, is entitled Argumentative Themes in Civil Defense, and is compared with Civil Defense and Society by Jeri Nehnevajsa and his colleagues at the University of Pittsburgh. The comparison indicates that the two reports are not incompatible, although the category schemes used in the two seem quite different.

This report suggests that there are sixteen general areas into which civil defense materials can be placed. The categories are only relatively independent, but certainly serve to distinguish various positions in the civil defense dialogue. The report also offers the following tentative conclusions regarding the frequency of materials appearing in the New York Times for the period cited:

1. The greatest percentage (39.4%) of all arguments identified referred to fallout shelters.
2. The largest percentage of all stories (43.2%) were found to be favorable to OGD policies, and, when the neutral articles are removed from consideration, the percentage rises to 69.9%.

## Introduction

As part of the work of Michigan State University under Contract OCD-PS-64-71 with the Office of Civil Defense, Department of Defense, a content analysis of argumentative themes relating to civil defense topics was made. This first report seeks to identify the major arguments for and against civil defense policies, determine their general tone, and relate materials found in the media to the sources of media items. This report is limited to analysis of the New York Times from May, 1961, to the beginning of the New York newspaper strike in November, 1962. This period of time is picked because of the increased interest in civil defense by the general population, and the subsequent increase in materials relating to civil defense to be found in the nation's press.

A major problem to be faced in any attempt at media analysis is the selection of the unit of analysis. Previous content analyses have selected the sentence, the paragraph or even the entire newspaper item as the basic unit on which description and conclusions are to be based. It seemed to us that these selections, while justified by the purposes of the researcher, do not fit the needs of the communication researcher or the communication practitioner. The researcher who uses the results of content analysis to construct meaningful messages will find that the sentence or paragraph will not necessarily provide him with usable information. The communication specialist, charged with constructing messages to appear in the nation's media, may find traditional analysis by article of little use.

The content categories developed indicate the major ideas present in the media, but usually do not indicate the complexity of materials composing the messages. Neither do they indicate the structure of arguments which may have been used. For these reasons, it was decided to attempt a content analysis of materials in the New York Times on the basis of the argumentative themes to be found in articles contained in the newspaper.

## II

The New York Times is generally considered to present more complete information on a given topic than any other American newspaper. Furthermore, since we were concerned with identifying all arguments relevant to civil defense, rather than only geographically relevant arguments, our analyses were confined to the New York Times for the period between May, 1961, and November, 1962. This period was picked because of the heightened interest in civil defense activities during the period, which assured as wide a range of materials as possible.

All articles and information relating to civil defense were examined. Thus the materials to be considered in the analysis did not represent a sample of information, but a consideration of all items which were related to civil defense issues. Items examined totaled 602.

Our concern was not only with the argumentative themes, but also with the general tone of civil defense materials present in the media. The OCD should expect that many items will represent a position favorable to civil defense, while other articles will be unfavorable to policies of the OCD. Therefore, an analysis was made of the general tone of the item as well as the tone of each argument present within an item. Tone is characterized as favorable, neutral, or unfavorable.

A third research concern was that the sources be identified for each item or argument. We felt that it would be helpful to know if specific source types could be identified as authors of specific argument types. Nine general source types were identified, and an attempt was made to break down the nine general source types into more specific source types. Figure A identifies the source categories consulted for the total item and, when possible, for arguments found within an item.

Figure A

Federal Government		Federal Government		State Level		State Level		Local Level	
Official Release	Non-official, but attributable	Official Release	Non-official, but attributable	Official	Non-official, but attributable	Official	Non-official, but attributable	Official	Non-official, but attributable
1. White House	1. White House	1. Governor	1. Governor	1. Governor	1. Governor	1. Mayor	1. Mayor	1. Mayor	1. Mayor
2. OCDM	2. OCDM	2. State Legislature	2. State Legislature	2. State Legislature	2. State Legislature	2. City Council or equivalent	2. City Council or equivalent	2. City Council	2. City Council
3. USDA	3. USDA	3. Defense	3. Defense	3. Defense	3. Defense	3. Civil Defense	3. Civil Defense	3. Civil Defense	3. Civil Defense
4. Defense Department (other than OCDM)	4. Defense Department (other than OCDM)	4. Establishment	4. Establishment	4. Civil Defense	4. Civil Defense	4. Police	4. Police	4. Police	4. Police
5. Congress	5. Congress	5. State Police	5. State Police	5. State Police	5. State Police	5. National Association	5. National Association	5. National Association	5. National Association
6. State Department	6. State Department	6. Governors Conference	6. Governors Conference	6. Governors Conference	6. Governors Conference	6. Other	6. Other	6. Other	6. Other
7. Federal Office of Emergency Planning	7. Federal Office of Emergency Planning	7. New England	7. New England	7. New England	7. New England				
8. AEC	8. AEC	8. Other	8. Other	8. Other	8. Other				
9. Other	9. Other								

  

Local Level		International		Item Obtained from	
Non-official, but attributable	Official Release from Private Group	News Release	Private Citizen	Private Citizen	Non-determinable
1. Mayor	1. SANE	1. UN or UN Committee	1. Physicist	1. Physicist	1. Physicist
2. City Council or equivalent	2. Committee on Correspondence	2. Soviet Press	2. Scientist, but not Physicist	2. Scientist, but not Physicist	2. Scientist, but not Physicist
3. Civil Defense	3. Private Corporation	3. British Press	3. Named Private Citizen, but not Scientist	3. Named Private Citizen, but not Scientist	3. Named Private Citizen, but not Scientist
4. Police	4. Individual in RAND	4. West German Press	4. Unnamed Private Citizen	4. Unnamed Private Citizen	4. Unnamed Private Citizen
5. National Association	5. Individual in Soviet Government	5. Japanese Press	5. U.S. Senator	5. U.S. Senator	5. U.S. Senator
6. County Officials	6. Other Private Group Named	6. Editorial Writer	6. U.S. Representative	6. U.S. Representative	6. U.S. Representative
7. Other	7. Other Private Group Unnamed	7. Feature Writer	7. State Legislator	7. State Legislator	7. State Legislator
		8. Other	8. Book Reviewer	8. Book Reviewer	8. Book Reviewer

Minor research concerns reported here include (1) placement of the item in the paper, e.g., editorial, bylined news story, feature article, letter to editor, etc.; (2) item locale, i.e., international, national, state level, local level; and (3) major theme of item, e.g., fallout shelters, nuclear attack, radiation effects, stocking and marking programs.

Our procedure was to locate an item relating to civil defense in the New York Times and determine: (1) date of item, (2) placement of item within paper, (3) locale for item, (4) source releasing item to the media, (5) major theme of item, (6) general tone of item with respect to civil defense policies, (7) number and description of argumentative themes contained within the item, (8) attitudinal tone of argumentative themes, and, when possible, (9) source of each argumentative theme identified within the item. This information provided the basic data on which this report is based.

### The Argumentative Themes

Determination of content categories for any content analysis is difficult, yet crucial, to the analysis. Any defined set of categories is necessarily artificial, since categories which have overlapping content as well as common content will have to be combined into single categories. The basis for such decisions rests with the researcher. It may be that another researcher, working with the same data, will develop different categories.

In this study, we developed sixteen different argumentative themes found in the New York Times. We make no claim that these argumentative themes are completely independent. Some of the categories developed seem to overlap, and we defend our categories on the basis of utility rather than on the basis of complete independence. Below, we describe each argumentative theme and give



the criteria for placing any theme within a category. Appendix B shows representative arguments from each category as they are actually found in the New York Times. It should be noted that Appendix B shows examples only, and attempts to pick arguments which are positive, neutral and negative in tone, without purporting to be representative of the proportions which are actually found in the media with respect to tone.

#### FALLOUT SHELTERS - GENERAL

An argumentative theme is recorded within this category if its subject deals with fallout shelters and if it does not involve the issue of public versus private shelters. Such a statement may assert that fallout shelters will or will not afford a given amount of protection in a particular situation. It might discuss the number of lives that could be saved by shelters or whether shelters should be used as extra rooms (classrooms, offices, family rooms, etc.). Arguments are included under this category if they concern the program for marking and stocking shelter space. Statements concerning the amount of protection a shelter will give against fallout, fire, blast, immediate thermal radiation, could be recorded under this theme or under nuclear physics, depending on the context of the surrounding material. If the context is primarily referring to nuclear physics, it would be coded under that argumentative theme. Otherwise, it would be coded as Fallout Shelter -- General theme.

## FALLOUT SHELTERS -- PUBLIC VS. PRIVATE

An argumentative theme is recorded within this category if its subject is concerned with the argument about public versus private shelters. Such a statement may assert that the United States should adopt a system of public shelters, private shelters, or both. It may discuss whether private shelters should be kept private, as long as the moral issue of secrecy is not raised. Statements are included under this theme if they concern home shelter equipment. Statements are recorded in this category which discuss the advisability of government aid to private shelter builders.

## MORAL ARGUMENT

An argumentative theme is recorded within this category if its subject is the moral issue involved in civil defense. Such a statement may assert that we do or do not have the right to use anti-sabotage measures in shelters. It may discuss whether we have a right to admit or refuse to admit people seeking entrance to private or public shelters. Statements will be recorded in this category if they discuss whether people in a "safe" area should repulse individuals coming from an area under attack. Statements asserting or denying that civil defense measures will replace or prevent other measures being taken to prevent war will be recorded under this theme.

## ENCOURAGE WAR - DISCOURAGE WAR

An argumentative theme is recorded within this category if its subject deals with the idea that civil defense measures will either encourage or discourage war. Such a statement may assert that civil defense will or will not act as a deterrent to nuclear war. It may assert that civil defense is or is not a form of insurance against another war. Statements will be recorded here if they discuss the possibility that any enemy will increase the number of yield of its atomic weapons to counteract civil defense measures. Statements that the enemy will or will not want to strike before our civil defense measures are complete will be recorded in this category.

## TIME OF PREPARATION

An argumentative theme is recorded within this category if its subject deals with the appropriate timing for civil defense measures. Such a statement may assert that action should or should not be taken right now to protect the nation in the future. It may discuss whether enough is now known to proceed immediately with an extensive civil defense program, or whether more research is needed. Statements are recorded in this category if they assert that the Federal government is or is not already prepared to follow through with any given civil defense effort.

## NATURE OF ENEMY

An argumentative theme is recorded within this category if its subject is the nature of the enemy in relation to United States

civil defense measures. Such a statement may assert that the Soviet Union does or does not have a civil defense program of its own. It may discuss how extensively the Soviets or Red China have prepared for civil defense. Statements will be recorded in this category which argue that the Soviets really want peace, or really want war, as will statements which discuss whether or not Russians feel their cause is worth protecting or advancing.

#### TYPE OF ATTACK

An argumentative theme is recorded within this category if its subject is the type of attack against which we should or should not be prepared. Such a statement may discuss the effect attack conditions have on the number of people who would survive either with or without protection. It may discuss the possibility of the enemy missing its target. Statements concerning where the enemy will be most likely to attack will be recorded here, as will statements concerning how many times the enemy might be likely to attack any given area. Statements will be recorded here when they discuss how much protection various forms of civil defense can provide in the event of various types of attack.

#### POST ATTACK PHASE

An argumentative theme is recorded within this category if its subject deals with what will happen and what should be done after a nuclear attack has occurred. Such a statement may assert that provisions should or should not be made for continuation of communications between federal, state, and local government. Such

a statement may assert that civilization or life itself may or may not be worth saving after nuclear attack. Statements concerning the advisability of banks, businesses and industries preparing for continuation of services after an attack will be recorded here. Statements are recorded in this category if they concern medical supplies for treating people injured in an attack, sanitation facilities after an attack, or methods of procuring food for populations of devastated areas after an attack. When a statement is specifically concerned with military control of the country after an attack, it will be recorded here. If the discussion is of military control in general, and not confined to such control after an attack, it is recorded under Political Arguments.

#### ECONOMIC ARGUMENT

An argumentative theme is recorded within this category if its subject concerns the costs of civil defense items. Such a statement may assert that civil defense is or is not too expensive in relation to other priorities. It may simply state how much civil defense would or should cost, or it may assert that more research is necessary in order to determine the cost of civil defense.

Statements concerning who should spend what sums of money for civil defense are recorded in this category. Statements asserting that the public has or has not received adequate return for its civil defense dollar are recorded here.

## NUCLEAR PHYSICS

An argumentative theme is recorded within this category if its subject is nuclear physics related to civil defense measures. Such a statement may advise evacuation of highly populated areas on the grounds that such areas would be devastated by blast, shock wave, or fire storm. It may advise against evacuation on the grounds that fallout makes evacuation useless. Statements concerning the amount and type of damage that can be done by modern nuclear weapons will be recorded in this category, as will statements giving specific information about the types of protective measures necessary against specific results of a nuclear explosion.

## HISTORY

An argumentative theme is recorded within this category if its subject attempts to relate historical events to present civil defense measures. Such a statement may assert that we should try to avoid the errors of past civil defense efforts. Such a statement may discuss the notion that past civil defense efforts may or may not have been successful. Statements will be recorded here if they discuss Hiroshima or Nagasaki and assert that these cases are or are not valuable sources of data for future civil defense efforts. Statements will be recorded in this category if they discuss the possibilities that fires or pestilence might develop after a nuclear attack as they did after heavy bombing in European cities during World War II.

## DISARMAMENT

An argumentative theme is recorded within this category if its subject is disarmament in relation to civil defense efforts. Such a statement may assert that the best protection we can have will or will not be gained by destroying the nuclear weapons we have or by not building more weapons. Such a statement may assert that we should or should not encourage other nations to destroy their nuclear weapons. A statement is recorded in this category if it discusses the possibility that we can or cannot deter a nuclear attack if our retaliatory power is so great that the enemy knows it would be destroyed by our counter attack. Statements are recorded here if they suggest that we should or should not divert the money, time, or energy we spend on civil defense to peaceful means of settling our differences with an enemy.

## CIVIL DEFENSE POLICY

An argumentative theme is recorded within this category if its subject deals with the amount and nature of civil defense leadership and information available to the public. Such a statement may assert that adequate civil defense information is or is not available to the public. It may discuss whether we can get the type of civil defense program the nation needs without federal government plans and funds. Statements are recorded in this category if they discuss who should be responsible for informing the public about civil defense efforts. Statements asserting that particular local or state officials should act as organizers and leaders after an attack are recorded in this category.

## NATURE OF AMERICAN PUBLIC

An argumentative theme is recorded within this category if its subject deals with the nature of the American people in relation to civil defense efforts. Such a statement may assert that a civil defense program in this country is or is not evidence that the American public has the will to defend and promote American ideals. Such a statement may assert that the American public has or has not the will to survive nuclear attack, or that it is or is not possible to predict how Americans would react to a nuclear war. Statements concerning the possibility that international crises may or may not influence public interest in civil defense measures are recorded here as are statements concerning the possibilities that the American public are not psychologically prepared to face a threat of World War III.

## AMOUNT AND TYPE OF PREPARATION

An argumentative theme is recorded within this category if its subject deals with various kinds and amounts of civil defense preparation that should or should not be made. This category, however, excludes statements relating to fallout shelters, since there are two categories for statements regarding the necessity for fallout shelters. Statements in this category may assert that special types of preparation should or should not be made for protection of people who live near Air Force ballistic missile sites. Statements in this category may discuss the level of attack for which it is feasible to prepare. It may assert that a civil defense program should or should not depend on the efforts of the



civilian population. Statements regarding the advisability of evacuation are recorded here as are statements concerning the nature and advisability of providing warning systems to guard against attack.

#### POLITICAL ARGUMENT

An argumentative theme is recorded within this category if its subject is primarily a reference to politics or political matters. Such a statement may assert that all the civil defense leaders are or are not "political hacks." It may discuss whether the surplus grain storage program is a political trick whereby the Department of Agriculture can write the surplus off its books. Statements offering general praise or blame for civil defense programs sponsored by the administration or by other political groups are recorded in this category. Political campaign promises of programs to solve many problems at once, including civil defense problems, are recorded here.

#### General Coding Procedures

For any category, our sole concern was with the arguments in the article. Statements of fact, which were not used to make assertions were not considered arguments. Thus a statement which said that "modern atomic weapons can be made to yield 75 megatons of explosive force," would not be considered unless that fact was used to draw the conclusion that we needed increased civil defense measures as a result of the "effectiveness of modern weapons." Statements which were made in the future tense were automatically considered as

argumentative in nature, although many of them were considered neutral in tone, rather than favorable or unfavorable to OGD policies.

The initial determination of content categories was made from a sample of items taken randomly from the total number of items. With the content categories determined, a single coder coded the entire population of items. A second coder coded approximately 25% of the same items in order to provide a reliability estimate. The two coders achieved over 80% agreement. On this basis, we decided to use the code as prepared by the coder who had coded the entire population of items.

Our method of analysis of the argumentative themes consisted of reading through the entire article to ascertain whether there were statements of an argumentative nature within it. Once we determined that there were such statements, we returned to the beginning of the article to find the first such argument. Next we attempted to place the argument within one of our 16 categories, and ascertain the correct tone for the argument. Then we attempted to determine whether or not the argument could be identified as coming from a particular source listed in our breakdown of sources (Figure A). We then proceeded to locate the second argumentative theme in the article and determine its category, tone and source. This procedure was followed until all arguments appearing in the item were located and categorized.

## III

Basic Description of the DataPlacement of Articles within the Paper

The placement of articles relating to civil defense in the New York Times was analyzed by separating the 602 articles into ten categories: (1) editorial or other "viewpoint of paper" item, (2) News story -- no byline, (3) News story -- with byline, (4) feature -- no byline (background story, without current event references), (5) feature -- with byline, (6) letter to editor, (7) advertisement, (8) magazine article (published in New York Times Magazine Section on Sunday), (9) review of book, movie, or TV, and (10) cartoon or picture (when published separately from a story).

Table 1 shows that the most frequently appearing civil defense materials were news stories, which accounted for 83% of all items between the two categories of news stories. As might be expected, the civil defense related items appearing least frequently are reviews, non-bylined feature stories, and magazine articles (the latter represented in the population by a single example).

Item Locale

The locale of the story was distinguished on four levels: local, state, national and international. The coder was instructed to place the locale of the story in that area to which the preponderance of material in the story seemed to relate. Table 2 shows that the majority of items were national in origin. This table also indicates the character of the New York Times as a "national" newspaper. Comparing the New York Times' items reported on in this study with samples of civil defense items from Chicago, Illinois, and

TABLE 1

<u>PLACEMENT OF ARTICLE</u>	<u>Percentage</u>
Editorial	2.7
News story-No Byline	55.7
News story-Byline	27.1
Feature-No Byline	.3
Feature-Byline	2.5
Letter to Editor	7.5
Advertisement	1.0
Magazine Article	.2
Review	.8
Cartoon or Picture	2.2
<b>TOTAL</b>	<b>100.0</b>

TABLE 2

<u>ITEM LOCALE</u>	<u>Percentage</u>
International	.83
National	51.16
State Level	25.41
Local Level	22.60
<b>TOTAL</b>	<b>100.00</b>

Lansing, Michigan, papers, we found a considerably greater percentage of national civil defense stories in the Times than in either of the other two papers.

### Major Theme of Story

A major theme was identified for each of the 602 items in our population. There were ten categories of major themes. They included: (1) fallout shelters -- general, (2) fallout shelters -- public versus private, (3) nuclear attack, (4) radiation effects, (5) stocking and marking of shelters program, (6) general defense policies, (7) likelihood of war, (8) disarmament, (9) general civil defense policies, and (10) other.

Table 3 shows that the most frequently cited major themes, ignoring the other category, were fallout shelters -- general (48% of the total) and general civil defense policies (14% of the total). It should be noted that the fact that an item was placed within a particular category for its major theme does not mean that argumentative themes of varying natures might not be identified within the story. For example, a story whose major theme seemed to be about fallout shelters might contain political arguments or economic arguments within the story.

### Source of Item

A newspaper item can frequently be identified as being issued by some source, e.g., an official government source. We made such a determination for the 602 items appearing in our population, using the broad categories appearing in Figure A. Table 4 shows the percentage of items which can be attributed to a particular issuing source. The federal government, including official and

TABLE 3

<u>MAJOR THEME OF STORY</u>	<u>Percentage</u>
Fallout Shelters-General	47.8
Fallout Shelters- Public vs. Private	2.5
Nuclear Attack	.8
Radiation Effects	1.8
Stocking and Marking Program	6.2
General Defense Policies	.3
Likelihood of War	1.2
Disarmament	.8
General Civil Defense Policies	14.3
<u>Other</u>	<u>24.3</u>
TOTAL	100.0

non-official releases account for over 24% of the total number of items, while items obtained from private citizens account for the next largest total. Note that the "Item Obtained from Private Citizen" category consists not only of letters to the editor from private citizens, but also of news stories seemingly obtained from other than official sources. If this category were divided into stories obtained from citizens not connected with government, and those citizens representing some contact with government, e.g., a U.S. Senator or Representative, the percentage of items obtained from Private Citizens drops below the 20% figure. Appendix C contains a table giving a frequency count of all items, broken down into finer source categories than Table 4.

TABLE 4

<u>Source of Item</u>	<u>Percentage</u>
Federal Government Official Release	18.8
Federal Government Non-Official, but Attributable	4.8
State Level Official	19.1
State Level Non-Official but Attributable	1.0
Local Level Official	8.5
Local Level Non-Official but Attributable	5.3
Official Release from Private Group	14.0
International News Release	5.5
Item Obtained from Private Citizen	22.2
Non-Determinable	.8
<hr/> TOTAL	<hr/> 100.0

#### Frequency of Argumentative Themes

There were a total of 837 argumentative themes identified in the 602 items in our population. This is an average of 1.4 themes per newspaper article or item. By far the greatest percentage of these themes had reference to Fallout Shelters. Table 5 shows 39.4% of all argumentative themes refer primarily to fallout shelters. The figure would increase even more if we had placed all arguments which at least mentioned fallout shelters into one of the fallout shelter categories. Notice that the "moral argument" which received

TABLE 5

<u>CONTENT CATEGORIES</u>	<u>Percentage</u>
Fallout Shelters-General	36.4
Fallout Shelters- Public vs. Private	3.0
Moral Argument	3.5
Encourage War	4.8
Time of Preparation	.3
Nature of Enemy	1.9
Type of Attack	.8
Post Attack Phase	6.5
Economic Argument	4.8
Nuclear Physics	1.9
History	.6
Disarmament	1.6
Civil Defense Policy	6.7
Nature of American Public	12.9
Amount and Types of Preparation	7.4
Political Argument	6.7
<hr/> TOTAL	<hr/> 100.0

Much of the space in certain national magazines accounts for only 3.5% of the total number of argumentative themes identified in this study.



### General Tone

Each item was further identified as generally favorable or unfavorable to policies of the OCD. This determination was made by a strict consideration of the tone of the argumentative themes in each item. If there were more argumentative themes which seemed to be favorable to OCD policies than there were negative argumentative themes, the article was considered favorable in general tone. If the balance was reversed the article was considered negative in tone. Neutral articles represented either a numerical cancellation of negative with positive arguments, or an item in which no arguments were presented. Table 6 shows the breakdown of items in terms of the general tone of the entire item. The table shows that by far the greatest number of items are favorable to OCD policies. If we remove all neutral items from consideration, the percentage of favorable items rises to 69.9% of the total of 416 items which take an attitudinal position.

### Source of Argumentative Themes

We also attempted to identify the source of each argument within an item. Thus an item released by a federal agency may refer to an argument coming from a nuclear physicist. In such a case, the individual argumentative theme would be classified as emanating from a private citizen, even though the article represented a government release.

Table 7 shows that most argumentative themes, 31.0%, are identified with private citizens. The next most frequent source of argumentative themes is the federal government, accounting for 28.8% of the total. Local level arguments account for only 9.8% of the total.

TABLE 6

<u>GENERAL TONE OF ITEM</u>	<u>Percentage</u>
Favorable	48.2
Neutral (Balanced)	4.7
Neutral (No Arguments)	27.3
Unfavorable	20.8
<b>TOTAL</b>	<b>100.0</b>

TABLE 7

<u>SOURCE OF ARGUMENTATIVE THEMES</u>	<u>Percentage</u>
Federal Government Official Release	23.3
Federal Government Non-Official, but Attributable	3.5
State Level Official Release	12.3
State Level, Non-Official, but Attributable	.2
Local Level Official Release	6.8
Local Level, Non-Official but Attributable	3.0
Private Groups	12.4
International News Release	7.0
Private Citizens	31.0
Non-Determinable	.5
<b>TOTAL</b>	<b>100.0</b>

## IV

Analysis of the Basic Data

In this section of the report, some of the relationships among our basic data categories will be studied. Specifically, we report (1) the relationship between argumentative theme categories and the source of those themes, (2) between the argumentative theme categories and the specific tone of each argument, and (3) between the source of each argumentative theme and the general tone of the item. These analyses can only be suggestive of possible relationships, but indicate areas where further work might be indicated.

Argumentative Theme versus Theme Source

In this analysis, we are concerned with the question of whether particular argumentative themes are associated with certain kinds of sources. Table 3 shows the results of this analysis. In this table, the argumentative themes identified are tabulated against the source identified with the theme. In reading the table, it should be noted that the source being referred to is not the source of the entire article, but rather is the source identified with the particular argument.

We expect to find a relatively well-distributed set of arguments across sources. That is, if the discussion over civil defense policies in the press is to be well-balanced, we should expect about as many arguments associated with official government sources as are associated with private groups and individuals. A look at the totals running across the bottom of Table 8 shows that over the entire set of argumentative themes we do seem to have this balance.

TABLE 8

	Federal Government Official Release	Fed. Govt. Non-Off., but Attributable	State Level Official	State Level Non-Off., but Attributable	Local Level Official	Local Level Non-Off., but Attributable	Official Release from Private Group	International News Release	Item Obtained from Private Citizen	Non-Determinable	
Fallout Shelters- General	74	13	49	2	26	4	36	15	35	1	305
Fallout Shelters- Public vs. Privt.	7	0	2	0	2	1	1	0	12	0	25
Moral Argument	0	0	2	0	2	0	3	4	13	0	29
Encourage and Discourage War	2	1	1	0	0	0	12	4	19	1	40
Time of Preparation	3	0	0	0	0	0	1	0	0	0	4
Nature of Enemy	2	0	0	0	0	0	4	3	7	0	16
Type of Attack	2	0	0	0	1	0	0	0	4	0	7
Post Attack Phase	18	3	3	0	2	0	10	0	13	0	54
Economic Argument	19	2	9	0	2	0	2	2	5	0	41
Nuclear Physics	4	0	1	0	1	0	2	1	6	1	16
History	2	1	0	0	0	0	0	2	0	0	5
Disarmament	0	0	0	0	0	0	4	1	3	0	13
Civil Defense Policy	16	2	5	0	3	3	5	3	14	0	56
Nature of American Public	18	3	7	0	12	5	17	11	35	0	103
Amount & Types of Preparation	17	2	9	0	5	12	6	1	9	1	62
Political Argument	10	2	10	0	1	0	2	7	24	0	56
	194	29	103	2	57	25	105	59	259	4	

TOTAL = 837

If we divide the table into those arguments associated with official government releases at any level and compare that figure with the totals associated with private groups and individuals, we find that there are 354 argumentative themes associated with official government sources, and 364 themes associated with private groups and individuals. This does indeed represent a balanced position in the civil defense policy controversy.

However, if we look at individual arguments, the balance is harder to see. The Moral Argument, for example, is greatly overbalanced in favor of private groups and individuals, and there are actually only 4 argumentative themes which can be identified as coming from official government sources. The Economic Argument, shows a balance just the reverse of the Moral Argument category. Here, almost all of the attention has been paid by Federal, official sources, and almost no attention has been paid by private sources. The Disarmament category shows the same pattern as does the Moral Argument category. Private sources have been interested in this category, not government sources.

The real question regarding the desirability of a balanced position cannot be answered in this report. We need to establish the relative effectiveness of each argumentative category before deciding whether the failure of government sources to construct and use arguments from the moral argument category represents a serious weakening of the position of OCD. If we were to find, through field research, that the Moral Argumentative theme were the most effective theme in terms of changing attitudes, then we might have to conclude that even though the total position seems to represent a balanced position, the federal government does not have the advantage in the overall policy discussion. This report can only indicate the need for such research.

### Argumentative Theme versus Specific Tone of the Theme

We have already suggested that the general tone of the newspaper articles used for this study was favorable to overall OCD policies (Table 6). In this analysis, we ask the question as to the relationship between the argumentative themes and the attitudinal tone of those themes. Table 9 shows this relationship. The overall results show the attitudinal tone of the arguments identified to be favorable to OCD policies. The 532 favorable arguments represent 63.5% of the total number of argumentative themes. Themes specifically unfavorable to OCD policies represent only 30.1% of the total.

However, there are a number of disparities in the table. While most of the arguments are favorable, those in the Encourage War -- Discourage War category and in the Disarmament category are unfavorable to OCD policies. That is, there are more arguments saying that civil defense efforts will encourage war and will hinder disarmament efforts than arguments arguing that civil defense will not encourage war or hinder disarmament. If future research should show that these are important categories, then we must conclude that official sources might well complete arguments of this type.

### Argumentative Theme Source versus General Tone of the Article

In this analysis, we are concerned with the relationship between the source identified with particular arguments, and the general tone of the article in which the argument appears. Table 10 shows the results of this analysis.

The results of this analysis are straightforward. We expect to find articles associated with official government sources at any level to be almost completely favorable to civil defense policies. The table shows that this is

TABLE 9

Argumentative Theme Categories	Tone of Argumentative Themes			Totals
	Favorable	Neutral	Unfavorable	
Fallout Shelters- General	212	13	80	305
Fallout Shelters- Public vs. Private	14	4	7	25
Moral Argument	16	5	8	29
Encourage and Discourage War	11	2	27	40
Time of Preparation	4	0	0	4
Nature of Enemy	7	3	6	16
Type of Attack	4	1	2	7
Post Attack Phase	44	1	9	54
Economic Argument	23	2	16	41
Nuclear Physics	8	1	7	16
History	2	2	1	5
Disarmament	0	1	12	13
Civil Defense Policy	35	2	19	56
Nature of American Public	58	10	40	108
Amount and Types of Preparation	57	2	3	62
Political Argument	37	4	15	56
TOTALS	532	53	252	837

TABLE 10

## Source of Argumentative Theme

29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



indeed the case. The table shows that 62.7% of all articles from official government sources at all three levels of federal, state and local are favorable to civil defense policies. Only 6.4% of the items associated with official government sources are unfavorable to civil defense policies.

The only category of source releasing items to the New York Times which shows a larger number of unfavorable items than favorable ones is the category of items obtained from private citizens. Many of these will be in the form of letters to the editor or as arguments contained within a general story and obtained from a private citizen. Official releases from private groups, like SANE or the Committee on Correspondence, also show a high percentage of unfavorable arguments, but certainly not a majority of arguments.

From this analysis, we can only conclude that during the period studied, civil defense was not considered negatively by most of the sources writing on the topic.

### Summary

This content analysis cannot be described as representative of the nation's press. It was conducted on only one newspaper, and conducted over a limited period of time. We would expect to find that percentages reported in this report would not obtain for other types of news media, nor perhaps for other papers.

However, this analysis does provide an indication as to the types of arguments used in the civil defense area, the nature of sources identified with those sources, and some ideas of the relationship between these variables and attitudinal variables relating to the general tone of the arguments.

In this report, we suggest that there are sixteen general types of arguments to be found in the New York Times. These arguments range from general arguments about the desirability for fallout shelters to arguments attempting to relate civil defense activities to disarmament activities. What we cannot suggest in this study is the relative effectiveness of various argumentative categories. That is, if you were to argue that we need civil defense because it will discourage war, and I argue that we need civil defense because we have a moral duty to protect ourselves from attack, this study does not indicate which of these two types of arguments is the most effective in terms of changing attitudes. This is the type of study which we propose for the coming year's work.

APPENDIX A

A COMPARISON OF TWO CIVIL DEFENSE REPORTS:

Civil Defense and Society, by Jeri Nehnevajsa

and

Argumentative Themes in Civil Defense:

(1) A Content Analysis of the New York Times,

by Erwin P. Battinghaus

This appendix presents a comparison between the University of Pittsburgh study, Civil Defense and Society, by Jeri Nehnevajsa (Contract OCD-OS-62-267, Office of Civil Defense, Department of Defense) and the Michigan State University report, Argumentative Themes in Civil Defense: (1) A Content Analysis of the New York Times, by Erwin P. Bettinghaus (Contract OCD-PS-64-71).<sup>\*</sup> That the two reports are different in content, scope, methodology, and objectives is readily apparent. However, careful analysis of both has indicated to our satisfaction that the reports are sufficiently complimentary in pertinent areas that the similarities, and in some cases the differences, are useful in the future determination of those kinds of arguments which are most persuasive in the area of civil defense. It should be noted at this point, and will be elaborated on later, that many of the apparent differences stem from differences in the terminologies used rather than from fundamental inconsistencies.

The Michigan State study undertook a content analysis of a major newspaper, the New York Times, for the period between May, 1961, and November, 1962, with the assumption that rigorous design is essential to a systematic study of the civil defense message system. All material relating to civil defense during this period was determined and categorized, using as the major unit of analysis the argumentative themes appearing in the items. From the actual content studied, it was determined that all themes could be placed in one of sixteen relatively independent categories. Using this methodology, it was possible to determine the number and nature of the themes which appeared in one major newspaper source during a specified period.

---

\* This appendix was prepared by John R. Weston and Robert B. Arundale of the Department of Communication, Michigan State University, under the direction of Erwin P. Bettinghaus.

The University of Pittsburgh study took an entirely different approach. As we interpret it, the author takes the position that civil defense may be viewed as a complex, dynamic system operating within our society and having considerable impact upon both our society and other societies. The fact that the short and long run effects of the implementation of such a system are highly speculative, has produced a great deal of conjecture, and has resulted in arguments for and against both the "idea" of civil defense and specific civil defense programs. The claim is made that arguments against civil defense or any such system are part of ten fundamental "barriers" to acceptance. Each argument opposing Civil Defense policy is considered to be a manifestation of the existence of a particular barrier for an individual and is coded accordingly in the report.

Because the methodologies of the two reports are so different, it is not appear to correspond closely. In one report, a specific category system is developed through consideration of the actual content under study, while in the other, a general category system is used which is based on an underlying rationale and which subsumes any argument. Obviously, the issue is not whether one system is "right" or "wrong," or for that matter, if neither or both are "right" or "wrong." Rather, consideration should be given to the differences in the respective objectives of the studies and to the usefulness of the methodologies employed in reaching these objectives.

The objectives of the Pittsburgh report are much broader than those of the Michigan State report. Based on "an extensive search of the pertinent literature over a five year period" and a consideration of selected, empirical field research data taken from other pieces of research, the Pittsburgh report presents the entire complex of negative civil defense arguments within a systematic framework of barriers to acceptance. A rationale for the existence of each

barrier is developed within the civil defense framework, allowing some broad conclusions to be tentatively made concerning the impact of civil defense on American society. The report also explores and discusses the problems of civil defense in terms of technical ambiguities, politics, and important human values, modestly attempting to show the importance of their interdependencies. The Pittsburgh report is not a final statement of the complexities of civil defense, but rather, provides some of the "raw materials in terms of which sound debates about the nation's civil defense policies may continue... in which more evidence, and less passion, may be brought to bear upon problems." (Nehnevajsa, p. 531) The report is, then, relatively complete from the standpoint of providing a framework within which Civil Defense personnel can operate in formulating future arguments.

The Michigan State study is a segment of on-going research having the ultimate objective of providing the Office of Civil Defense with specific information concerning those kinds of civil defense arguments which are most persuasive to the different types of people making up the American public. As a first step in this research, it was felt necessary to determine the kinds of arguments being put forth in the media and the relative frequency with which they occur. (It is assumed that, within limits, the relative frequency provides an estimate of the importance of a particular theme.) In this first phase, the report also identified the arguments as to tone (favorable, neutral, or unfavorable to Civil Defense), source, item locale, and placement of the article.

In short, on most bases the two reports are not comparable. The Pittsburgh report is more global and is concerned with the impact of civil defense on society and with presenting what might be termed an "ethic." The Michigan State study, while less "global," will contribute to the determination of the kinds of civil defense arguments which are most persuasive. It is in the eventual

utilization of these expected findings by civil defense authorities that due consideration should be taken of the probable impact which policy decisions based on the findings could have on society.

Despite differences in scope and objectives, a comparison of the two reports can be made with respect to the systems of categorizing civil defense arguments. Because the two investigators chose to look at the civil defense situation from different viewpoints, the approaches used in categorizing are somewhat different. Since the two reports deal with the same general body of material, however, the two category systems should be, by and large, compatible. To test this, all arguments given in the Pittsburgh report as examples of the existence of each barrier were coded in terms of the categories used in the Michigan State report. The results of this cross-codification are shown in Table II and are analyzed and interpreted in some detail in the body of the report which follows.

#### Barrier I - Terminal Goals

Barrier I of the Pittsburgh report pertains to the unacceptability of the terminal goals of civil defense and revolves around the notion that the protection of human lives and property in the event of enemy attack is undesirable. Very little needs to be said about this barrier since, as Nehnevajsa states, "There are probably no Americans who subscribe to this notion." (Nehnevajsa, p. 528) The fact that the Michigan State study uncovered no such arguments, either, supports his contention. The reason for including this barrier as a category when, in fact, there are no civil defense arguments belonging to it appears to result from the nature of the category system. As the author points out, the barrier paradigm is a representation of opposition to any system, and while this one barrier does not seem to be applicable to the civil defense system, many systems could be defined for which it would be crucial.

TABLE II

THEMES	BARRIERS									
	I Terminal Goals	II Importance of Terminal Goals	III Operational Goals	IV Importance of Operational Goals	V Effectiveness of System	VI Total Cost of System**	VII Time Cost of System***	VIII Impact on Personality	IX Impact on Society	X International Impact
Civil Defense (General)**	16	12			2			1	1	
1 Shelters (General)	55	6		6	36			7		
(Public										
2 Shelters vs.	8			1	5				2	
(Private)										
3 Moral Argument	9							9		
4 Encourage War-	49							4	2	43
Discourage War										
5 Time of Preparation	0									
6 Nature of Enemy	1								1	
7 Type of Attack	12			9	3					
8 Post Attack Phase	13	3			9			1		
9 Economic Argument	2	1								1
10 Nuclear Physics	0									
11 History	0									
12 Disarmament	3	2								1
13 Civil Defense Policy	2			1					1	
14 Nature of American Public	11	1						1	6	3
15 Amount and Type of Preparation	0									
16 Political Argument	3							1	7	
	189	25	0	17	55	0	0	24	20	48

Where an example made more than one claim, each claim was categorized separately.

\*\* Not originally included in Michigan State category system.

\*\*\* No-specific examples included in the Pittsburgh report.



## Barrier II - Importance of Terminal Goals

Barrier II assumes the acceptability of the terminal goals (protecting life and property), but discusses opposition of civil defense programs in general because of their relatively low priority or importance. This opposition, as summarized by Nehnevajsa, includes arguments about non-importance such as: civil defense systems are not needed at this time because a major war is unlikely; the fate of man is determined by God; it is unlikely that nuclear weapons would be used even if war did come; a preemptive attack would effectively destroy our enemies; the enemy would not dare attack because of our retaliatory power; and arms control or total disarmament places the threat of nuclear war in the realm of the impossible.

In an analysis of the examples given in the report as indicative of the existence of Barrier II, it was found that about one-quarter would have been placed under the category "Fallout Shelters-General" using the Michigan State system. Such arguments made specific mention of fallout shelters rather than of overall programs. Nearly one-half of the examples given under Barrier I, however, dealt with the unacceptability of civil defense programs in general, as in the following examples:

...(quoting Senator Stephen M. Young) The time has come to abolish the OCDM's billion-dollar boondoggle. We must devote our utmost efforts toward finding a peaceful solution to the world's problems. That is our only permanent shelter...

...(quoting Governor Robert Meyner) There is one and only one defense against a nuclear war -- and that is peace...

...(quoting Senator Stephen M. Young in the Progressive) In my view, no civil defense program will protect our citizenry adequately should war strike. The survival of 180,000,000 Americans -- indeed of all mankind -- depends not on civil defense but on peace.  
(Nehnevajsa, p. 107)

...If...it is not apparent to persons of even the most limited intelligence, that arms are whatever we wish to use as arms, and that technological advances have made even the great boons of man (i.e. bacteriology, chemistry) into potential means of mass slaughter, and that truly the means are so numerous that defense becomes impossible, I guess we are doomed. (Nehnevajsa, p. 107)

This is a disconcerting barrier, for the Michigan State report does not include a category for such arguments. Since it appeared from the Pittsburgh report that a considerable number of arguments revolved around the notion that civil defense programs in general are unnecessary, why was it that the Michigan State report included no such arguments?

A reasonable explanation for this discrepancy emerges when the time span chosen for the Michigan State content analysis is considered. The period was from May, 1961, to November, 1962, and was selected because it represented a time interval when there was increased interest in civil defense due to the Cuban situation, and a subsequent increase in materials pertinent to the study in the nation's press. Although this selection had some obvious advantages, it also had the disadvantage of excluding from the sample an important theme which probably would be more in evidence between rather than during crises. In other words, as the public perceives an increase in the probability of nuclear war, there will be a corresponding decrease in arguments that civil defense in general is unnecessary. Instead, the public will become more concerned with specific civil defense programs such as fallout shelters, (more concerned with "operational goals" to use Nehnevajsa's terminology). This difference in the presence or absence of arguments on civil defense in general was the major inconsistency in the two category systems. In future research dealing with the effective persuasiveness of civil defense themes, this finding, as well as others of a less serious nature, will have to be taken into consideration. In addition to this cross-codification, some examples of Barrier II were

also placed in the Michigan categories "Post-Attack Phase" and "Disarmament."

Barriers III and IV - Operational Goals and Importance of Operational Goals

Barriers III and IV have to do respectively with the unacceptability of the operational translation of the terminal goals and with opposition because of the relatively low priorities assigned to such operations. The unacceptability of the operations (Barrier III) is largely a result of questions arising from ambiguities surrounding the type of attack and the desired protection. Implicit in the arguments that a particular operation is unacceptable, however, are the notions both that the operation or system does not provide adequate protection and that it is of low priority. (Barrier IV). It seems then that not only is it difficult to cast a particular argument into either Barrier III or Barrier IV, but it is also possible that an argument could meet the criteria for Barrier V (Effectiveness). This is a problem which the Pittsburgh report faces and which is, of course, true to varying degrees for any category system. For example, the following argument is given as evidence both for Barriers III or IV, and V:

...Fallout shelters themselves are only a minimum; firestorm protection is needed too...  
 ...Many fallout shelters that happened to be within a firestorm area would not afford survival -- because the fires would use up all available oxygen quickly -- unless they could be sealed and were equipped with a bottled oxygen supply. (Nehnevajsa, p. 187)

While it is not implied that the Michigan State category system has completely solved the problem of overlapping categories, the problem has been substantially reduced. The importance of having relatively exclusive categories is a major concern of the Michigan State research, for only by achieving a high degree of mutual exclusivity will it be possible to determine the relative persuasability of themes and to test the interactions. For these purposes, then, it has often been meaningful to subdivide the material covered by certain

of the Pittsburgh barriers into several argumentative themes. This process was followed for Barrier I and II above, and for other barriers. In dealing with the examples given in Barriers III and IV as indications of opposition to the operational goals of civil defense, it was found that about one-half fell into the Michigan State category "Type of Attack," and about one-half into "Fallout Shelters-General." It does not follow, however, that Nehnevajsa should have created exclusive classes of arguments for the Pittsburgh report. As has been pointed out, the objectives of the two projects are widely different; and the approach taken in the Pittsburgh report to meet its objectives proved to be very fruitful.

#### Barrier V - Effectiveness of the System

Barrier V in the Pittsburgh report pertains to the effectiveness of a civil defense system on any grounds. "Barrier V postulates that terminal objectives are acceptable, and, also, sufficiently important. It assumes that their operational translation into design goals is also acceptable and considered important. Yet, the objectives may be viewed unattainable. Or else, particular designs to meet the objectives may be viewed inadequate." (Nehnevajsa, p. 190)

Nearly three-quarters of the examples given in the Pittsburgh report as reflecting such views of effectiveness would fall into the Michigan State categories "Fallout Shelters-General" and "Fallout Shelters-Public vs. Private." This is reasonable, for when arguments are made about a civil defense system a major concern is with its degree of effectiveness. Since the major civil defense system considered in both reports is the fallout shelter, arguments for or against civil defense (i.e. for or against fallout shelters) will of necessity be statements about the effectiveness of shelters. This is noted in the description of the criteria for the Michigan State category "Fallout Shelters-General:" "Such a statement may assert that fallout shelters will or will not afford a given

amount of protection in a particular situation." (Bettinghaus, p. 6)

However, there is more involved in a civil defense system than just the shelters. The Michigan State categories are particularly helpful in defining these other areas, for it will be noted in Table II that in addition to the shelter categories, a number of the Pittsburgh examples fall in the category of "Post Attack Phase." People will eventually have to come out of the shelters and the final measurement of the effectiveness of the system must take into account the fact that "people have to survive not only the attack but also the conditions immediately following their egress from shelters." (Nehnevajsa, p. 207) The problems that might exist after the attack can be noted from examples quoted from both reports:

Dr. James K. Shafer, Health Advisor of the Office of Emergency Planning, said that rehabilitative care of sick and injured and maintenance of satisfactory health conditions for uninjured survivors would be a task of mammoth proportions. (Bettinghaus, p. 44)

They realize that any survivor of an all-out nuclear war will thereafter live the life of Hobbes' primitive man -- solitary, poor, nasty, brutish, and short. (Nehnevajsa, p. 291)

A number of the examples included under Barrier V would also be placed in the Michigan State category "Type of Attack." Nehnevajsa notes the importance of considering the type of attack: "...Assurances from some military authorities that they are able to defend their citizens do not specify how they propose to deal with possible biological attack. Certainly normal military methods of defense would be quite useless..." (Nehnevajsa, p. 286) Similar emphasis is placed on the type of attack in the Michigan State report: "the value of civil defense preparation would depend on the type of attack, the size of the blast, and whether the explosion was in the air or on the ground." (Bettinghaus, p. 42)

Effectiveness of a defense system is the combined effect of the various elements of the system. That is, it is necessary to consider shelters in the light of information about the effectiveness of shelters in general, as well as of private and public shelters, the post attack phase, and the various types of attacks. The important points of a system are thus identified, as well as the broad or overall concepts of the system. The two reports approach the same information, each from a different vantage point.

#### Barriers VI and VII - Total Cost and Time Cost of the System

The arguments for and against civil defense systems on the grounds of economic considerations were found in the Michigan State study to be about the sixth most frequent argumentative theme. ("Fallout Shelters-General" was the most frequent theme.) In the period covered by the analysis, about 4.8% of the total items dealt with this theme. Unfortunately, the Pittsburgh report does not list examples for its two barriers concerned with costs. An objective comparison is thus hard to make, but it appears that Barriers VI and VII are of the same nature as the arguments in the Michigan State category "Economic Argument."

Barrier VI deals with cost in such a manner that cost involves the total amount of money involved for a complete system. Barrier VII deals with cost per unit time, with the distinction that systems which may be unacceptable in terms of total cost may be acceptable if the cost is spread over a certain number of time units (or vice versa). Nehnevajsa observes, however, "it would be very hard indeed to use the available data to show that civil defense systems are viewed too expensive in absolute terms; or that they are viewed too expensive for the anticipated effectiveness." (Nehnevajsa, p. 298) Nehnevajsa also considers under cost certain money-equivalents like time, energy, or various inducements where money would be involved only indirectly. It is helpful to be aware of

this distinction of "types" of cost, and it is possible that information will be found to bring more importance to the distinction in future analyses.

The Michigan State report has placed all items of cost into the single category of "Economic Argument:" "An argumentative theme is recorded within this category if its subject concerns the costs of civil defense items. Such statements may assert that civil defense is or is not too expensive in relation to other priorities. It may simply state how much civil defense would or should cost...Who should spend what sums...[and] ...that the public has or has not received adequate return for its civil defense dollar..." (Bettinghaus, p. 10) Thus, while a direct comparison of arguments and examples was not possible, the nature of the considerations included in Barriers VI and VII and in the category "Economic Argument" would indicate that they are closely related.

#### Barrier VIII - Impact on Personality

Barrier VIII is concerned with opposition to civil defense because of the effects it may bring on personality. Nehnevajsa notes that the relations of civil defense systems and personality characteristics which bring non-acceptance are of two dimensions. First, there are arguments that civil defense efforts attract those of authoritarian and aggressive natures so that civil defense programs may reflect these outlooks. And second, there are arguments that civil defense may change some personality characteristics, in particular having an effect on personal anxiety, aggressiveness, selfishness, pessimism, and the development of a "black and white" view of life and of a false sense of security.

Just under one-third of the arguments which are classified as Barrier VIII would be included or classified under the Michigan State theme, "Fallout Shelters-General." In particular, these are the arguments in both reports dealing with the amount of protection provided and with the false sense of security created by shelters (or by civil defense in general). Over one-third of the arguments

which are included in Barrier VIII would be classified under the Michigan State theme "Moral Argument." In both reports, these arguments concern "shelter morality" (moral issues of the right to admit or refuse people to private or public shelters) and the changes in the personality and behavior of individuals toward shelters and toward each other under attack conditions. This example from the Pittsburgh report may serve to illustrate the type of argument:

..."In addition, the fascination with shelters, especially private shelters, has even thus far fostered some rather ugly and discouraging responses in our people -- a kind of defeatism and withdrawal in the face of the great issue of our day, and a reversion to the selfishness and cruelty of the savage. Already we have invented a grim term for what we expect of one another -- the phrase 'shelter morality'..."  
(Nehnevajsa, p. 415)

In addition, just under one-quarter of the arguments of Barrier VIII deal with the possibility that the overall changes in personality might tend to encourage war. These arguments would be included with those under the Michigan State theme "Encourage War-Discourage War." Arguments that civil defense systems might replace or prevent other measures being taken to prevent war are also included here. Finally, arguments under Barrier VIII dealing with the types of personalities drawn to civil defense and the corresponding effects on civil defense programs were included with the Michigan State theme "Political Argument." In similar manner, arguments concerning the possibility of widespread anxiety in the public were placed with the theme "Nature of the American Public."

#### Barrier IX - Impact on Society

In his introduction to Barrier IX, Nehnevajsa notes that in one sense his entire report discusses the effects of civil defense on society. In a narrower sense, however, the societal effects of civil defense may also form a barrier. There are four main components or factors which might bring non-acceptance of



civil defense systems because of high social cost. They are, in particular, the movement in the direction of increased centralization of power in the Federal government that would be necessary with a large civil defense program; the necessary increased concentration on the military establishment; and the regimentation which would be required in all phases of life to make the system effective (together with a loss of cherished values and diversion of resources to civil defense).. Each of these three above components of the unacceptable impact on society are part of what has been feared as leading to a "garrison society." In addition, there is a fourth component or consideration that civil defense has a potential to promote existing societal cleavages and to create new ones. ....

Because of the wide range of possible effects of civil defense on society and the corresponding wide range of arguments presented, it is difficult to establish a definite correspondence with the Michigan State themes. Two themes, however, do seem to relate generally to Barrier IX. About one-third of the examples in the Pittsburgh report would be placed under the Michigan State theme "Nature of the American Public." In the Pittsburgh report, these arguments deal with the necessary regimentation of life and loss of established values under a large civil defense system, and relate to arguments in the Michigan State report on whether or not the American people have the will to survive a nuclear attack or to defend American ideals and whether Americans are or are not psychologically prepared for World War III.

An additional one-third of the examples in the Pittsburgh report would be placed in the Michigan State category "Political Argument." Such arguments concern the possible increase in centralization of power in the Federal government and the increased emphasis on the military with a large civil defense system. Examples of such arguments are:

...(CD has caused) "The opening of the door to military and state controls over the individual."...

...CD would have an effect upon individual American homes, business and local government even more far-reaching than the effect of the draft program at the height of World War II. For through CD every American citizen would, in effect, be drafted into the military program of the U. S.... (Nehnevajsa, p. 476)

(It should be noted that the Michigan State report includes certain other discussions about civil defense efforts and control under "Civil Defense Policy.")

Finally, several examples included under Barrier IX might be related to the Michigan State categories "Shelters-Public vs. Private" and "Encourage War-Discourage War." Arguments which Nehnevajsa finds concerned with the possible effects of large civil defense systems in promoting existing societal cleavages and creating new ones do not appear to be covered in the Michigan State categories. However, as Nehnevajsa notes "...it would be difficult to use the available evidence to suggest that civil defense programs have been so divisive in nature that they have become dangerous to the nation's social order." (Nehnevajsa, p. 431) Thus, although this aspect of the barrier has been mentioned in some instances, it does not appear to be a widespread effect and would probably not be prevalent to a great extent in the American press.

#### Barrier X - International Effects of Civil Defense

Barrier X, dealing with the non-acceptance of civil defense systems because of international effects, has two major aspects. First, civil defense systems may be unacceptable because they indicate to the world a selfishness or lack of concern on the part of the U. S. for the other countries which would undoubtedly be affected should nuclear war occur. (Along with this idea of selfishness goes that of poor utilization of needed resources.) Second, civil defense systems may be unacceptable because of their effects on potential enemies.

That is, civil defense may enhance the likelihood of war through its provocative nature, it may tend to accentuate the arms race, and it may have a "hardening" effect on the positions taken by nations in seeking arms control or disarmament. In these respects, civil defense might defeat its purpose by increasing the expectations of war and thus leading to "higher tendencies" for war to occur.

Nearly all of the examples given under Barrier X would be classified under "Encourage War-Discourage War" in the Michigan State report. These are, in particular, arguments on whether or not civil defense is a deterrent to war or a form of "insurance" against war, together with statements on the accentuation of the arms race (say, to counteract shelter effectiveness), and on the possibilities that an enemy may want to strike before civil defense measures are complete. Two examples from the wide range of arguments may make the point clearer:

The following is from "An Open Letter to President Kennedy" which was presented as an advertisement in The New York Times by 200 professors of five (5) universities in the Boston area: "To sum up, we believe that although the present civil defense program, and in particular the construction of fallout shelters, might save a small fraction of the population in a nuclear war, this potential gain is more than offset by the fact that such activity prepares the people for the acceptance of nuclear war as an instrument of national policy. (Bettinghaus, p. 37)

...By preparing people psychologically for war, by increasing their fear and hatred for an enemy, CD is in fact increasing the danger of war by creating the sort of climate that will produce it. (Nehnevajsa, p. 514)

Other arguments included in Barrier X might fall under "Nature of the American Public" or other categories, but they are not a major emphasis.

Nehnevajsa's consideration of civil defense's possible effect in creating an international image of selfishness or lack of concern on the part of the U. S.

does not find a place in any of the Michigan State categories. Indeed, Nehnevajsa notes that such considerations do not appear supported by existing evidence, and "...since empirical studies abroad have apparently failed to address themselves to the effects of America's civil defense upon world environment, it would seem reasonable to conclude from this that this has not been viewed as a problem of particular salinency." (Nehnevajsa, p. 482)

### Summary

This report has attempted to point out both the "real" and apparent differences in the findings of the Pittsburgh and Michigan State reports. Because the scope and range of the two reports are widely different, a point-by-point comparison was not found meaningful. Both reports have developed systematic categories of arguments pertinent to civil defense, the analysis and interpretation of which has been the purpose of this report. The differences are largely the result of the following:

1. Methodology. The Pittsburgh categories were selected by a priori consideration of the barriers to any system, while the Michigan State categories were selected by consideration of actual civil defense arguments without any attempt to generalize to other systems.
2. Objectives. The Pittsburgh report emphasizes the social context within which civil defense is imbedded and upon which it has an impact. The Michigan State report is one unit of an integrated research program aimed at determining the relative persuasibility of civil defense themes.
3. Situational Factors. The relatively high level of world tension which existed during the period when the Michigan State study was carried out appears to have resulted in the

exclusion from the mass media of arguments concerning civil defense in general. This situation will be taken into consideration in subsequent research. Closely related to this circumstance is the fact that almost one-half of the arguments during that period revolved around fallout shelters. Presumably during a period of relatively less tension there would be a lower proportion of arguments about the pragmatic aspects of a system, compared to arguments on the abstract and philosophical concerns.

Mention should also be made of the fact that certain of the Michigan State categories were not utilized in the cross reference with the Pittsburgh examples (i.e., Time of Preparation, Nuclear Physics, History, and Amount and Type of Preparation). This does not suggest that there are no actual arguments to fill these categories, nor that civil defense arguments exist which cannot be taken care of by the Barrier paradigm. Rather, there are two additional factors which must be taken into account to explain the difference (other factors might possibly be added):

1. The arguments given in the Pittsburgh report were included solely as illustrative examples of a particular barrier and were not intended to represent a population of arguments from a given sample period.
2. The Michigan State report included 837 arguments while the examples in the Pittsburgh report numbered under 200. Since arguments categorized as Time of Preparation, Nuclear Physics, and History had low frequency in the Michigan State report, the probability of such arguments being used in the Pittsburgh report was understandably low.

APPENDIX B

Argumentative Theme Examples

Fallout Shelters -- General

## Examples;

Stuart L. Pittman, Assistant Secretary of Defense, responded to Rep. Holifield's criticism that the Administration's fallout shelter program was one of cheapness instead of effectiveness, and said that any kind of shelter was better than none and that to provide underground shelters for all Americans would require a tremendously big and expensive federal works program.

Roswell L. Gilpatric, Deputy Secretary of Defense, said shelters could save 40,000,000 - 55,000,000 lives in a nuclear attack. "The major premise of the new civil defense program is that fallout shelter space is clearly worthwhile in every part of the United States, in the large cities as well as smaller towns and rural areas.

Benjamin Tessler, president of Lancer Industries, said a shelter is not a playroom or guestroom. Shelters should be outfitted and maintained for specific emergencies. He stressed that any "spare room" concept would break down the intent of the civil defense plan.

Governor Robert B. Meyer took issue with President Kennedy's proposal for a survey of the need for air-raid shelters. He termed a "delusion" any suggestion that such shelters might assure the survival of a large number of persons in event of a nuclear attack.

George N. Serre, President of Greenfield Hill Village Improvement Association, Connecticut, announced its opposition to a projected underground civil defense control center on one of this town's historic sites.

A letter to the editor in The New York Times by Cyrus Levinthal, Professor at M.I.T., stated, "The advocacy of the shelter program is largely based on arguments independent of its real effectiveness and ignores the dangers created by the illusion of its effectiveness."



Fallout Shelters -- Public vs. Private**Examples:**

Other (Pentagon) officials expressed hope that strong White House leadership, the psychological impact of shelter construction in major buildings, and encouragement of local officials would spur home owners and landlords to build shelters on their own.

Fred W. Preller, Chairman, New York Assembly's Ways and Means Committee, announced that a pilot information center on shelters would be operated ----. At the same time the state and city directors of civil defense issued statements stressing the need for family shelters and declaring that city dwellers would not necessarily be doomed in a nuclear attack.

Thomas J. Lloyd, president of Amalgamated Meat Cutters and Butcher Workmen, and Patrick E. Gorman, the union's secretary, said in a joint article in the union's magazine that "the private bombshelter program isn't fair to those who have no chance of building their own." "What about the millions of people who live in hotels, apartments, and tenements?" they asked. "They don't even own property on which to build shelters," they said.

Rep. Robert Barry announced that 64% of those replying to a recent questionnaire were opposed to a government sponsored program of building fallout shelters.

Moral Argument

## Examples:

Dr. Herschel H. Hobbs of Oklahoma City, president of the Southern Baptist Convention, said a person "ought to take into his shelter as many people as he could accommodate without jeopardizing the lives of his own family."

Louis J. Lefkowitz, New York State Attorney General, recommended a bill to the Legislature that would provide criminal penalties for fraudulent and deceptive practices in the promotion, sale and construction of fallout shelters.

Rabbi Mandelbaum said that the Jewish concept of ethics required opening a family fallout shelter to all who asked for admission.

From a letter to the editor in The New York Times. "We all approved very much the column of Arthur Krock about shelters on January 2 except the last sentence. It should have read, "We should, therefore, not waste our energies in the futile preparation for the survival of an atomic war but should concentrate all our energies on achieving perpetual peace through intelligent cooperation with the other nations."

Paul Rand Dixon, chairman of Federal Trade Commission, said F.T.C. and the Defense Department had teamed up to kill off activities of the "fast-buck boys" who moved in on the fallout shelter market. "Ideologically, we're at war with communism," and false advertising of shelters, therefore, "comes pretty close to being treason."

A Jewish Biblical scholar said Judaic law would permit a man to defend the lives of his family, but any preparations for atomic war were immoral.

Encourage War -- Discourage War

Examples:

General Lyman L. Lemnitzer, chairman of the Joint Chiefs of Staff, said an adequate civil defense program was an "integral part of the overall deterrence" to war, and would provide "further unmistakable evidence of serious determination on our part."

This argument is from a letter to the editor in The New York Times by Jay S. Roth, Professor of Biochemistry, against a December 17 editorial that building shelters is a form of insurance. He said that a thermonuclear war would not be a chance occurrence like an automobile accident, thus the argument about insurance was not valid. He suggested that rather than spend upward of \$30 billion to bury ourselves in the ground, we devote at least this sum and equivalent efforts to exploring roads to peace.

The following is from "An Open Letter to President Kennedy" which was presented as an advertisement in The New York Times by 200 professors of 5 universities in the Boston area: "To sum up, we believe that although the present civil defense program, and in particular the construction of fallout shelters, might save a small fraction of the population in a nuclear war, this potential gain is more than offset by the fact that such activity prepares the people for the acceptance of nuclear war as an instrument of national policy.

"We believe that this acceptance would substantially increase the likelihood of war -- a war which will be permanently fatal to our democratic society, even if not to all of us."

Professor David F. Cavers of Harvard Law School, called shelter building part of the arms race and said it did not create a good climate for negotiation.

"You have to evaluate whether a shelter program makes war more or less likely," he said. He said he thought it made war more likely, "since fear and hatred are its likely products."

Dr. David J. Singer, writing in the October 1961 issue of the Bulletin of the Atomic Scientists, says that it would seem that a civil defense program would enhance neither our deterrent against direct attack nor against nuclear diplomatic blackmail.

Time of Preparation

## Examples:

Herman Kahn, author of On Thermonuclear War, said a "realistic civil defense program should be undertaken now to protect the nation ten years hence."

Governor Rockefeller tacitly conceded that the school fallout shelter program begun three months ago was making little or no progress. At the November special session, the governor insisted that the Republican controlled legislature pass the school shelter plan at once, rather than wait for the regular session in January. He maintained that speed was necessary so that school districts could place their share of planned shelter expenses in the 1962 budget then being drawn up.

Review of a television program on which a number of people gave their views on civil defense showed that there was a general agreement that more study is needed before an all-out shelter building program is started.

Representative Joe M. Kilgore, Texas Democrat, warned against repetition of earlier efforts to rouse the nation about civil defense unless the federal government was itself prepared to follow through with a major effort.

Nature of Enemy

## Examples:

Leon Goure, senior staff member of Rand Corporation, said that special doors have been installed to seal the Moscow subway tunnels against radiation. The subway could shelter two million persons. Mr. Goure, who visited nine Soviet cities last summer, said "the evidence leaves no doubt that Soviet authorities are quite serious about civil defense."

S. Vishnevsky, Russian author of an article about American civil defense efforts, said, "If only we could open the eyes of these moles armed with machine guns, they would surely see that no one threatens them with aggression and there is no sense hiding underground. But moles, as we know, are unseeing creatures, and moles of bourgeois origin, moreover, suffer from class blindness."

Western observers say that the Soviets also have a rather extensive civil defense program. A pamphlet titled "Be Ready for Anti-aircraft Defense" is addressed to children. It instructs children in the organization of civil defense units in schools. It covers measures ranging from air-raid drills to the use of gas masks and shelters.

Marshal Rodion Y. Malinovsky, Soviet Defense Minister, declared, "Shelters against atomic and hydrogen bombs are nothing but coffins and tombs prepared in advance." He also asserted that the Soviet Union was able "to wipe off the face of the earth" all industrial and administrative centers of the United States "with a single nuclear-rocket attack."

Aleksandr F. Sharov, Soviet architect declared, at a news conference on the problems of Soviet architecture, that atomic shelters were a "chimera" (a fire-breathing monster). One of about 100 newsmen asked whether the same practice was being followed in the Soviet Union, and he replied that "We have no such problem. We make no provision for such designs. We have no need for it."

Type of Attack

## Examples:

Secretary of Defense McNamara, in responding to a question, said: "I think it is at least as likely that (in the event of a nuclear war) our cities would be attacked as that our military targets would be attacked. I don't share the views of some that only the military installations would be targeted."

The following is from Dr. Willard F. Libby's reply to Dr. James Van Allen and seven University of Iowa physicists who have taken issue with Dr. Libby's nationally syndicated series of articles on how to survive atomic attack: "To estimate how many may be saved by shelters means having to estimate what the attack is. I chose to estimate a particular kind of attack which is considered most probable. But one could make an attack with no fallout at all, which was the case in the Japanese bombings, or an attack where all casualties were due to fallout and there was no blast damage at all!"

In the book, How to Survive the H-Bomb and Why, by Pat Frank, he contends that a surprise attack on the United States would kill at least 95 million. Most lives saved because of shelters will be saved during the critical forty-eight hours following the blast.

Review of a television program, during which a number of people gave their views about civil defense, points to agreement that the value of civil defense preparations would depend on the type of attack, the size of the blast, and whether the explosion was in the air or on the ground.



Robert E. Condon, Director, New York City Office of Civil Defense, said the metropolitan area might not be a target for a nuclear attack in the event of war. "A soundly conceived nuclear attack would not necessarily be aimed at densely populated areas. Rather, it probably would attempt to knock out this nation's military capacity to retaliate."

Post Attack Phase

## Examples:

Douglas Dillon, Secretary of the Treasury, has written Federal banking authorities that "it should be obvious that unless positive measures are taken by all members of the banking community to assure adequate records protection, the entire governmental program for the operational continuity of the nation's banking system in the event of attack would be in jeopardy."

Dr. Edward H. Teller, one of the nation's leading nuclear scientists, said, "If we do not become disorganized, and if we have elementary tools and food, I think in two or three hard and austere years we can repair the main damage" of a nuclear war in this country.

Dr. James K. Shafer, health adviser of the Office of Emergency Planning, said that rehabilitative care of sick and injured and maintenance of satisfactory health conditions for uninjured survivors would be a task of mammoth proportions.

Edward Thompson, Fire Commissioner of New York City, said that the Fire Department will soon put into operation two-level communication centers to control fire-fighting during and after an atomic bomb attack. The new type of center is considered atomic-bomb proof, except in case of a direct hit or near miss, he said.

Edward A. McDermott, Director of Federal Office of Emergency Planning, said that a survival plan is being developed for the period that would follow a nuclear attack. He added, if we prepare now, the worst consequences of an attack can be overcome, and our civilization will survive.

Economic Argument**Examples:**

"By any standard," said Secretary of Defense McNamara, "the present level of civil defense spending is not only inadequate but it is wasteful. It buys an organization but not a program."

New York State Assemblyman Mark Lane contended that New York State, in adopting a fallout shelter program, was "wasting several hundred million dollars in an illusion," and he urged that the \$100,000,000 to be allocated for a school shelter program be used to turn the peace movement into a political force. "Only in that way," he maintained, can the "unholy alliance of Republican and conservative Democrat be defeated in the State and the nation."

Opposition to the use of school funds for fallout shelters was expressed by Max Rubin, President, New York City Board of Education.

George H. Hallett, Jr., Executive Secretary of the Citizens Union, urged the councilmen to cut to a "fraction of its present size" the \$1,300,000 for civil defense. He said the civil defense function, as now being exercised by the Office of Civil Defense was questionable and should be shifted to the Defense Department.

Laymakers have cut the civil defense requests 74% since 1950. The 1960 annual civil defense budget averaged \$53 million less than the Interior Department spends protecting wildlife.

The White House said, "The appropriations requested today (\$73,200,000) will allow the food and medical stockpiling activities to keep pace with the expanded and strengthened civil defense program recently presented to Congress by the Secretary of Defense."

Nuclear Physics

## Examples:

Deputy Director of Medicine for the Atomic Energy Commission, R. L. Crosbie, said a ten-megaton warhead, of the largest type that might be carried by a Soviet bomber or large missile would produce great but not limitless havoc. Its explosive force would be equal to 10,000,000 tons of TNT or five times the force of the bomb dropped at Hiroshima.

If exploded above ground, this warhead would create sufficient "blast effect" nine and one-half miles away to destroy ordinary wooden and brick homes, whip up winds of 160 miles an hour, wrack heavy damage on above-ground communications and cause heavy casualties to unsheltered persons. It would produce enough heat to cause second-degree burns to people in the open twenty-four miles away. It would produce fatal radiation doses two miles away.

Experts say that after a major nuclear attack at least 75% of the United States would be blanketed by hazardous radiation from fallout. Radiation would remain deadly for two days in 25% of the country. After two weeks only 7% of the nation would remain covered by deadly residual radiation.

We learn from a report of studies carried out over the last year and one half by Dr. Tom T. Stonier of the Rockefeller Institute in behalf of the Scientist's Committee for Radiation Information that carbon monoxide, a heavy component of air, seeks low levels and infiltrates cellars and bomb shelters. According to Dr. Stonier, if the air contains .5% carbon monoxide it is fatal within one hour. If the level is .1% it will have an intoxicating effect in that time. Within the areas subject to firestorm after an attack only shelters

with certain specifications would be of value according to this analysis. These would have to be secure against heat and blast, airtight, and be furnished with independent oxygen supply.

History

## Examples:

Office of Civil Defense Mobilization officials contend that they have done some good work. They have a 1,650-man payroll. They have put out 479 million pieces of "educational" literature. O.C.D.M. has developed a fairly rapid communications net, capable of flashing warning of an impending attack to 450 centers across the country. The NEAR home warning system and CONELRAD radio system were developed under the auspices of O.C.D.M. There are 2,000 packaged 200-bed field hospitals stored in warehouses around the country which are an O.C.D.M. project.

The only detailed information on what happens in urban firestorms is that collected after the so-called "Gomorrab" air raid on Hamburg in 1943. A study published by chief medical officer of U.S. Strategic Bombing Survey showed a large proportion of those who survived the explosions died of carbon monoxide poisoning within the bomb shelter. Many who fled to the streets died from the heat which reached more than 1400 degrees F.

### Disarmament

#### Examples:

The President said, we will deter an enemy from making a nuclear attack, "only if our retaliatory power is so strong and so invulnerable that he knows he would be destroyed by our (counter) attack."

The following is from a letter to the editor by Eva Morreale: "What we need is commitment to total disarmament, not commitment to fallout shelters. The cause of world peace -- and the safety and welfare of New York State residents (and those in almost all other states of the Union) would have been far more advanced had the \$100 million appropriated to a shelter program been given to the United Nations."

A letter to the editor by Roger Franklin tells us "We who now believe in Gandhi's method consider that the use of violence in the nuclear age is neither expedient nor humane, and men must learn to settle international conflicts through non-violent techniques, where diplomacy fails. This does not, of course, mean nonresistance to evil, and it is not an easy way; but it is far more promising than the path of terror we are now following."

A letter to the editor claims that "calm consideration" would seem to demand immediate renunciation of the use of nuclear weapons, except in retaliation for a nuclear attack, as well as an enormous effort to find a way to take war permanently off a nuclear weapons standard.



Civil Defense Policy**Examples:**

Representative Peter W. Rodino, Jr. suggested today that the Defense Department send mobile exhibits around the country to point up the need for all-out civil defense effort.

A letter to the editor says, "Civil defense has been one area in which the American people have been virtually without leadership since the Soviets constructed their first A-bomb."

Part of an editorial article points out, "The Government has been shouting for months about the biggest fire in the world without coming up with a plan to deal with it."

In an editorial, we are told, "As a result of public argument and lack of clear government policy, the public is confused."

Mrs. Felix Ruvolo, spokesman for Californian Women for Peace, announced that a program dubbed Operation Mailback would take place soon. She said that it will involve mailing back to Washington the Government booklet "Fallout Protection." She added that from 600 to 800 women would meet in a downtown plaza shortly before noon, then proceed to the main Post Office a block away to mail the booklet.

The New Jersey director of Civil Defense stressed that most Civil Defense personnel in New Jersey were dedicated people doing a fine job. He added that do-nothings must get with it or get out, and "shirkers" in Civil Defense could spell the difference between disaster and success in case of a nuclear attack or other public crisis.

Nature of American Public.

## Examples:

Dr. Jay S. Bethe, Professor of Physics at Cornell, supported shelters because of his fear that during a period when each side has an invulnerable deterrent, cities are more likely to be targets than they would be otherwise. At the same time, he revealed a pessimistic view toward the effect of shelters.

The following is from a letter to the editor by John A. Brentlinger, Yale University: "The person who possesses a sense of responsibility for his family, country, and civilization will realize that goodness can be attained only in and through life. It is possible that for many, in the future, life will be bitter and unrewarding. What can one say who is willing to take that possibility into account, except "be prepared"?

Persons who at one time showed indifference to civil defense have at least been shaken by the President's appeals for greater effort, worsening of the Berlin crisis, and the Soviet government's decision to resume nuclear testing.

The following is from "An Open Letter to President Kennedy" presented as an advertisement in The New York Times by 200 professors from 5 universities in the Boston area: Most people don't understand what a thermonuclear war would entail and those who do know don't want to think about it.

Amount and Type of Preparation

## Examples:

Senator Kenneth B. Keating in New York urged today that the Government "launch an intensive search for means of air purification" to combat nuclear fallout. It certainly makes sense for us to spend as much money on ways to clear the atmosphere of radioactive fallout as on shelters to protect us from that danger," he said.

The Public Health Service announced plans to train sixty million Americans in the basic medical procedures that would be of value in a national disaster.

Atmospheric testing is needed to make sure the country's retaliatory power will be sufficient to deter aggression, said Governor Rockefeller.

A government official said that, in terms of a thermonuclear war, the traditional concept of emergency planning is no longer adequate. By and large, he said, the mobilization base has been designed with little consideration of the possible effects of massive destruction of facilities, supplies, and man power.

The Kennedy Administration asked Congress for \$10,000,000 to put into operation a home buzzer system that would give warning of impending nuclear attack. The system is called NEAR (National Emergency Alarm Repeater) and has been under development for five years.

Political Argument**Examples:**

The Governor's Conference Civil Defense Committee headed by Governor Rockefeller of New York issued a statement supporting civilian control of civil defense. The panel said that civil defense "policy, control, direction and coordination should remain under civilian authority in the executive offices of federal, state, and local governments," while "operations" should be carried out by civilian authorities.

Senator Stephen M. Young, Ohio Democrat, prime foe of civil defense on Capitol Hill, called Federal and state civil defense leaders "political hacks," and the civil defense program "completely unrealistic."

Alfred Dallago, chairman of Lancer Industries, Inc., said that Lancer had left the shelter business because of the apparent apathy on the part of the Administration and the public concerning the need for residential fallout shelters.

Percy Bugbee, General Manager of National Fire Protection Association, claims that fire effects from any nuclear attack would be devastating, yet the Defense Department planners for civil defense so far seem unwilling to face this fact and take adequate steps to protect the public.

**APPENDIX C**

**Some Unanalyzed Relationships**

**Table a. Distribution of Items by Specific Source**

**Table b. Major Theme of Item versus Placement in Paper**

Table A -- Distribution of Items by Specific Source

Federal Government Official Release		Local Level Non-official, but Attributable	
White House	23	Mayor	1
OCDM	9	Civil Defense Establishment	26
Defense Department	43	Police	4
Congress	16	Other	1
Federal Office of Emergency Planning	3	Official Release	
Other	19	From Private Group	
Federal Government Non-official, but Attributable		SANE	1
		Committee on Correspondence	5
		Religious Group	7
White House	3	Private Corporation	25
OCDM	1	Individual in Soviet Government	2
Defense Department	15	Other Private Group Named	42
Congress	2	Other Private Group Unnamed	2
Other	8		
State Level Official		International News Release	
		UN or UN Committee	1
Governor	30	Soviet Press	3
State Legislatures	39	Editorial Writer	16
Defense Establishment	1	Feature Writer	13
Civil Defense	12	Item obtained from Private Citizen	
Governors Conference	6		
New England Governors Conference	2	Physicists	6
Other	25	Scientists, not Physicists	10
State Level Non-official, but Attributable		Named Private Citizen	102
		U.S. Senator	5
State Legislatures	2	U.S. House Representative	6
Defense Establishment	1	State Legislators	5
Civil Defense Establishment	1		
Other	2	Non-Determinable	5
Local Level Official		Total	602
Mayor	12		
City Council or Equivalent	3		
Civil Defense Establishment	19		
Police	2		
Other	12		

Table b -- Major Theme of Item Versus Placement in Paper

	Editorial - view of paper	News Story - No Byline	News Story - Byline	Feature	Letter to Editor	Advertisement, Magazine, Book, Movie, TV	Cartoon or Picture (separate)	Totals
Fallout Shelters	10	176	69	8	25	5	10	303
Nuclear Attack and Effects	0	9	4	1	1	0	1	16
Stocking and Marking of Shelters Program	0	18	13	1	0	0	0	37
Defense Policies	3	50	22	5	2	6	0	88
Likelihood of War and Disarmament	0	4	1	0	7	0	0	12
Other	3	79	49	2	10	1	2	146
Totals	16	336	163	17	45	12	13	602